

## ACADEMIC PROFILE

**Professor Asit K. Chakraborti** obtained the M. Sc. degree in Organic Chemistry from Burdwan University, West Bengal, India in 1977 being placed first in the first class and Ph. D. degree in Synthetic Organic Chemistry from IACS, Kolkata, India in 1985. After post-doctoral research training in USA in the department of Chemistry, Clemson University, South Carolina, during 1985-1987 and in Medicinal Chemistry at Purdue University, Indiana, USA during 1987-1989 he joined the Department of Chemistry, Burdwan University as a faculty and served during 1990-1994. He moved to the department of Medicinal Chemistry of the Institute as Assistant Professor in 1994 and was elevated to Assoc. Professor in 1999 and Professor & Head in 2001. He has guided 38 Ph. D. and 130 Masters students, published 172 research papers (with > 8500 citation with *h* index of 55), and filed 42 patents. He has delivered 142 lectures in national/international symposium and received several awards and recognition.

### Research Interest:

A) Medicinal Chemistry: Target-based design and syntheses of new chemical entities in various therapeutic areas

*Tropical communicable and neglected diseases*: (a) Tuberculosis: inhibitors of FtsZ protein assembly, His G, isocitrate lyase (ICL), and malate synthase (ML); (b) Leishmaniasis: trypanothiane reductase (TR), and ribose-5-phosphate inhibitors.

*Non-communicable diseases*: (a) Inflammation: selective COX-2, dual COX-LOX, and mPGES-1 inhibitors for rheumatoid arthritis and their implication in other disease control such as cancer and CNS disorder; and PDE-IVB inhibitors for asthma and COPD; (b) Diabetes: PTP1B, GOAT inhibitors.

B) Organic Chemistry: Development of new concepts and synthetic methodologies.

*Catalysis*: Development of transition-metal catalysed and organocatalytic C-H activation reactions; noble/non-noble metal derived nanocatalysts; and hetero-bimetallic hybrid nanocatalysts for generation of new bio-active carbogens and late functionalisation of bio-active scaffolds.

*Green/Sustainable Chemistry*: Development of heterogeneous/solid-supported catalysts for organic reactions; microwave-assisted organic reactions; Use of innocuous reaction media- water, ionic liquids, and fluoruous solvents; Molecular level understanding of the role of water in promoting organic reactions; Non-solvent (organo-catalytic) uses of ionic liquids and delineating their role and the origin of catalysis for predictive catalyst modeling.

*Natural Products/Drug Synthesis*: Greener synthetic routes to bio-active natural products, cardiovascular drugs, and other biologically active molecules; All-water and protecting group-free synthetic strategies.

*Combinatorial Chemistry*: Development of methodologies for solid/solution phase synthesis of small molecular libraries; Strategies for new linkers and analytical protocols.

**Honours, Awards and Appreciations:**

Fellow, Indian National Science Academy, New Delhi, 2016

Fellow of the Indian Academy of Science, Bangalore, 2014

Ranbaxy Research Award 2004 (Pharmaceutical Sciences).

Indian Society for Mass Spectroscopy (ISMAS) Eminent Mass Spectroscopist Award 2009.

Chemical Research Society of India (CRSI) Bronze Medal 2006.

Fellow, Royal Society of Chemistry, Cambridge, U. K.

Best Research Guide Award for National level Rajnibhai V. Patel PharmInnova Award 2017-2018 for the most "Innovative Thesis" of Dr. Priyank Purohit in "Pharmaceutical Chemistry" under Ph D. category.

Best Research Guide Award for National level Rajnibhai V. Patel PharmInnova Award 2016-2017 for the most "Innovative Thesis" of Dr. Pradeep Jadhavar in "Pharmaceutical Chemistry" under Ph D. category.

Best Research Guide Award for National level Rajnibhai V. Patel PharmInnova Award 2015-2016 for the most "Innovative Thesis" of Mr. Sahaj Pancholia in "Pharmaceutical Chemistry" under M. Pharm. category.

Best Research Guide Award for National level Rajnibhai V. Patel PharmInnova Award 2014-2015 for the most "Innovative Thesis" of Mr. Dhameliya Tejas Manjibhai in "Pharmaceutical Chemistry" under M. Pharm. category.

Certificate of Appreciation for Thesis Advisor of 2013 Eli Lilly and Company Asia Outstanding Thesis First Prize Awardee (Dinesh Kumar).

Certificate of Appreciation for Thesis Advisor of 2012 Eli Lilly and Company Asia Outstanding Thesis First Prize Awardee (S Raha Roy).

Certificate of Appreciation for Thesis Advisor of 2009 Eli Lilly and Company Asia Outstanding Thesis First Prize Awardee (S V Chankeshwara).

Certificate of Appreciation for Thesis Advisor of 2009 Eli Lilly and Company Asia Outstanding Thesis Second Prize Awardee (S Sundriyal).

Tetrahedron Letters Most Cited Paper 2005-2008 Award.

Bioorganic and Medicinal Chemistry Letters Most Cited Paper 2005-2008 Award.

Tetrahedron Letters Most Cited Paper 2004-2007 Award.

Tetrahedron Letters Most Cited Paper 2003-2006 Award.

Member, National Academy of Sciences, India, Allahabad.

University Gold Medal 1977, The University of Burdwan.

Bardhaman Sammilani Gold Medal 1977, The University of Burdwan.

**Member Editorial Board:**

Asian Journal of Life Sciences  
Journal of Pharmaceutical Sciences & Emerging Drugs  
Technology Transfer and Entrepreneurship  
Mini-Reviews in Organic Chemistry  
Current Microwave Chemistry  
SOA Journal of Organic and Biomolecular Chemistry  
Open Chemistry Journal (Open Natural Products Journal)  
International Journal of BioSciences and Technology (IJBST)  
International Journal of Medical Sciences and Technology (IJMST)  
International Journal of Life Sciences and Technology (IJLST)

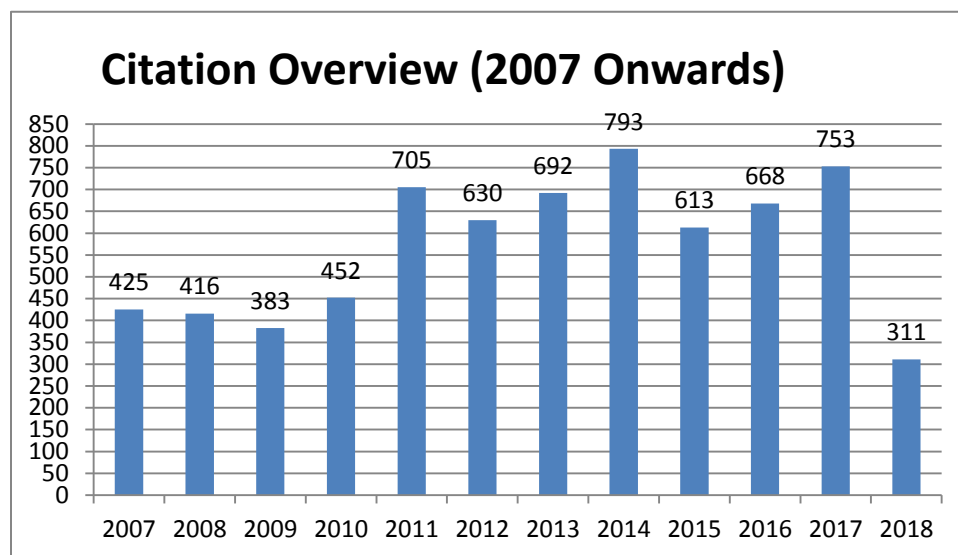
**Member Advisory/Expert Committee of Academic/Govt Institutions/Organizations:**

NAAC Peer Team. Nov 03, 2010-  
Advisory Committee, Institute of Pharmacy, NIRMA University, Ahmedabad.  
Research and Development Committee (RDC), Shooliny University, Solan, HP.  
Research Advisory Committee, NIT, Jalandhar, Punjab.  
Board of Studies in Chemistry, NIT, Jalandhar, Punjab.  
Doctoral Committee in Pharmaceutical Chemistry, Hamdard University, New Delhi.  
Nature Reader Advisory Panel,  
DST Fast Track Young Scientist Committee (Chemical Sciences) 2008- 2012.  
DST/SERB Swarnajayanti Fellowship Award (Chemical Sciences). 2014- 2017.  
SERB Project Assessment Committee in Organic Chemistry. 2012- 2015.  
DST BOYSCAST Fellowship Committee in Lifesciences. 2009-2011.  
University Research Board (URB), Thapar University, Patiala, Punjab.  
Board of Studies, UIPS, Panjab University.

## Research Contribution:

- A) **Publications:** Research Article 168; Review Article 4; Book Chapter 2  
 [Scopus Citation: 7739; Citation per paper 44.99; *h*-Index: 53]  
 [Google Scholar: 8575; Citation per paper 49.85; *h*-Index: 55; *i*10-Index: 135]  
 [Impact Factor (IF) 2016: Cumulative IF: 618.351; Average IF: 3.595]

Website: <http://akcresearchgroup.weebly.com/>



**Research Articles:** Total 168 [Scopus citation against each article provided]

- Tejas M. Dhameliya, Rishu Tiwari, Arkaprabha Banerjee, Sahaj Pancholia, Dharmarajan Sriram, Dulal Panda, and Asit K. Chakraborti,\* “Benzo[d]thiazole-2-carbanilides as New Anti-TB Chemotypes: Design, Synthesis, Biological Evaluation, and Structure-Activity Relationship,” *Eur. J. Med. Chem.*, **2018**, *155*, 364-380. **IF: 4.519**
- Sumit S. Chourasiya, Aabid Abdullah Wani, C. M. Nagaraja, Asit K. Chakraborti,\* and Prasad V. Bharatam,\* “N-(Acridin-9-yl)arenesulfonamides: Synthesis, Quantum Chemical Studies and Crystal Structure Analysis to Establish the Tautomeric Preferences,” *Tetrahedron*, **2018**, *74*, 3634-3641. **IF: 2.651**.
- Shobhit Kumar Tiwari, Dilip Kumar Singh, Mayurbhai Kathadbhai Ladumor, Asit K. Chakraborti, and Saranjit Singh,\* “Study of degradation behaviour of montelukast sodium and its marketed formulation in oxidative and accelerated test conditions and prediction of physicochemical and ADMET properties of its degradation products using ADMET Predictor<sup>TM</sup>,” *J. Pharm. Biomed. Anal.*, **2018**, *158*, 106-118. **IF: 3.255**.
- Neha Patel, Minhajul Arfeen, Radhika Sood, Sadhika Khullar, Asit K. Chakraborti, Sanjay K. Mandal and Prasad V. Bharatam,\* “Can Remote N-Heterocyclic Carbenes Coordinate with Main Group Elements? Synthesis, Structure and Quantum Chemical Analysis of N<sup>+</sup> Centre Complexes,” *Chem. Eur. J.*, **2018**, *24* (24), 6418-6425. **IF: 5.317**.

5. Deepik Kathuria, Sumit S. Chourasiya, Sanjay K. Mandal, Asit K. Chakraborti, Uwe Beifuss, and Prasad V. Bharatam, "Ring-chain isomerism in conjugated guanylhydrazones: Experimental and theoretical study," *Tetrahedron*, **2018**, 74 (23) 2857-2864. **IF: 2.651**.
6. Bhavin V. Pipaliya and Asit K. Chakraborti,\* "Ligand-Assisted Heteroaryl C(sp<sup>2</sup>)-H Bond Activation by Cationic Ruthenium(II) Complex for Alkenylation of Heteroarenes with Alkynes Directed by Bio-relevant Heterocycles," *ChemCatChem.*, **2017**, 9 (22), 4191-4198. **IF: 4.803**.
7. Tejas M. Dhameliya, Sumit S. Chourasiya, Eshan Mishra, Pradeep S. Jadhavar, Prasad V. Bharatam and Asit K. Chakraborti,\* "Rationalisation of Benzazole-2-carboxylate vs Benzazine-3-one/Benzazine-2,3-dione Selectivity Switch during Cyclocondensation of 2-Amino thiophenols/phenols/anilines with 1,2-Biselectrophiles in Aqueous Medium," *J. Org. Chem.*, **2017**, 82 (19), 10077-10091. **IF: 4.849**. **4.805**
8. Priyank Purohit, Kapileswar Seth, Asim Kumar, and Asit K Chakraborti,\* "C-O Bond Activation by Nickel-Palladium Hetero-Bimetallic Nano-Particles for Suzuki-Miyaura Reaction of Bioactive Heterocycle-Tethered Sterically Hindered Aryl Carbonates," *ACS Catal.*, **2017**, 7 (4), 2452-2457. **Selected by the Editorial Board of SYNFACTS for its important insights and published the highlights in SYNFACTS 2017, 13(05), 0526. Cited 3 times. IF: 10.614.** **11.384**
9. Sumit S. Chourasiya, Dhara Patel, C. M. Nagaraja, Asit K. Chakraborti, and Prasad V. Bharatam, "Sulfonamide vs. Sulfinimide: Tautomerism and Electronic Structure Analysis of N-Heterocyclic Arenesulfonamides," *New J. Chem.*, **2017**, 41 (16), 8118-8129. **Cited 1 time. IF: 3.269**
10. Bhavin V. Pipaliya and Asit K. Chakraborti,\* "Cross Dehydrogenative Coupling of Heterocyclic Scaffolds with Unfunctionalised Aroyl Surrogates by Palladium(II) Catalyzed C(sp<sup>2</sup>)-H Aroylation through Organocatalytic Dioxygen Activation," *J. Org. Chem.*, **2017**, 82 (7), 3767-3780. **Cited 7 times. IF: 4.849** **4.805**
11. Shweta Bhagat, Minhajul Arfeen, Legesse Adane, Savita Singh, Prati Pal Singh, Asit K. Chakraborti, Prasad V. Bharatam, "Guanylthiourea derivatives as potential antimalarial agents: Synthesis, in vivo and molecular modelling studies," *Eur. J. Med. Chem.* **2017**, 135, 339-348. **Cited 1 time. IF: 4.519**
12. Tarun Handa, Shalu Jhajra, Shweta Bhagat, P. V. Bhartam, Asit K. Chakraborti, Saranjit Singh\* "Molecular insight into atypical instability behavior of fixed-dose combination containing amlodipine mesylate and losartan potassium," *J. Pharm. Biomed. Anal.*, **2017** 136, 66-80. **Cited 1 time. IF: 3.255**.

13. Babita Tanwar, Asim Kumar, Perumal Yogeeswari, Dharmarajan Sriram, Asit K Chakraborti,\* “Design, Development of New Synthetic Methodology, and Biological Evaluation of Substituted Quinolines as New Anti-tubercular Leads,” *Bioorg. Med. Chem. Lett.*, **2016**, 26 (24), 5960-5966. **Cited 7 times. IF: 2.454.**
14. Minhajul Arfeen, Shweta Bhagat, Rahul Patel, Shivcharan Prasad, Ipsita Roy, Asit K. Chakraborti and Prasad V. Bharatam\* “Design, synthesis and biological evaluation of 5-benzylidene-2-iminothiazolidin-4-ones as selective GSK-3 $\beta$  Inhibitors,” *Eur. J. Med. Chem.*, **2016**, 121, 727-736. **Cited 8 times. IF: 4.519**
15. Sumit Sunil Chourasiya, Deepika Kathuria, Sampada Sunil Nikam, Ashok Ramakrishnan, Sadhika Khullar, Sanjay K. Mandal, \* Asit K Chakraborti,\* and Prasad V. Bharatam,\* “On the Azine-Hydrazone Tautomerism of Guanylhydrazones: Evidence for the Preference Towards the Azine Tautomer,” *J. Org. Chem.*, **2016**, 81 (17), 7574-7583. **Cited 5 times. IF: 4.849 4.805**
16. Kapileswar Seth, Sudipta Raha Roy and Asit K. Chakraborti,\* “The palladium and copper contrast: a twist to products of different chemotypes and altered mechanistic pathways,” *Catal. Sci. Technol.*, **2016**, 6 (9), 2892–2896. **Cited 6 times. IF: 5.773**
17. Pradeep S. Jadhavar, Tejas M. Dhameliya, Maulikkumar D. Vaja, Dinesh Kumar, Jonnalagadda Padma Sridevi, Perumal Yogeshwari, Dharmarajan Sriram and Asit K. Chakraborti,\* “Synthesis, biological evaluation and structure–activity relationship of 2-styrylquinazolones as anti-tubercular agents,” *Bioorg. Med. Chem. Lett.*, **2016**, 26 (11), 2663–2669. **Cited 3 times. IF: 2.454.**
18. Sahaj Pancholia, Tejas M. Dhameliya, Parth Shah, Pradeep S. Jadhavar, Jonnalagadda Padma Sridevi, Perumal Yogeshwari, Dharmarajan Sriram and Asit K. Chakraborti,\* “Benzo[d]thiazol-2-yl(piperazin-1-yl)methanones as New Anti-mycobacterial Chemotypes: Design, Synthesis, Biological Evaluation and 3D-QSAR Studies,” *Eur. J. Med. Chem.*, **2016**, 116, 187–199. **Cited 12 times. IF: 4.519**
19. Kapileswar Seth, Sudipta Raha Roy and Asit K. Chakraborti,\* “Synchronous Double C-N Bond Formation via C-H Activation as a Novel Synthetic Route to Phenazine,” *J. Chem. Soc. Chem. Commun.*, **2016**, 52 (5), 922-925. **Cited 19 times. IF: 6.319**
20. Naisargee Parikh, Sudipta Raha Roy, Kapileswar Seth, Asim Kumar and Asit K. Chakraborti,\* ““On-water” multicomponent reaction for the diastereoselective synthesis of functionalized tetrahydropyridines and mechanistic insight,” *Synthesis* **2016**, 48 (4), 547-556. **Cited 12 times. IF: 2.652**

21. Vaibhav A. Dixit, Prakash Chandra Rathi, Shweta Bhagat, Holger Gohlke, Rasmus K. Petersen, Karsten Kristiansen, Asit K. Chakraborti, Prasad V. Bharatam,\* "Design and synthesis of novel Y-shaped barbituric acid derivatives as PPAR $\gamma$  activators," *Eur. J. Med. Chem.*, **2016**, *108*, 423-435. **Cited 6 times. IF: 4.519.**
22. Prasad V. Bharatam,\* Minhajul Arfeen, Neha Patel, Priyanka Jain, Sonam Bhatia, Asit K. Chakraborti,\* Sadhika Khullar, Vijay Gupta and Sanjay K. Mandal,\* "Design, Synthesis, Structural Analysis of Novel Divalent N(I) Compounds and the Identification of a new Electron Donating Ligand," *Chem. Eur. J.*, **2016**, *22* (3), 1088-1096. **Cited 9 times. IF: 5.317**
23. Babita Tanwar, Dinesh Kumar, Asim Kumar, Md. Imam Ansari, Mohammad Mohsin Qadri, Maulikkumar D. Vaja, Madhulika Singh, and Asit K. Chakraborti,\* "Friedländer annulation: Scope and limitations of metal salt Lewis acid catalysts in selectivity control for the synthesis of functionalised quinolines," *New J. Chem.*, **2015**, *39* (12), 9824-9833. **Cited 4 times. IF: 3.269**
24. Sumit S. Chourasiya, Deepika Kathuria, Shaminder Singh, Vijay C. Sonwane, Asit K. Chakraborti and Prasad V. Bharatam,\* "Design, Synthesis and Biological Evaluation of Novel Unsymmetrical Azines as Quorum Sensing Inhibitors," *RSC Advances*, **2015**, *5* (97), 80027-80038. **Cited 4 times. IF: 3.108**
25. Dinesh Kumar, Pradeep S. Jadhavar, Manesh Nautiyal, Himanshu Sharma, Prahlad K. Meena, Legesse Adane, Sahaj Pancholia, and Asit K. Chakraborti,\* "Convenient synthesis of 2,3-disubstituted quinazolin-4(H)-ones and 2-styryl-3-substituted quinazolin-4(3H)-ones: Applications towards the synthesis of drugs," *RSC Advances*, **2015**, *5* (39), 30819-30825. **Cited 20 times. IF: 3.108**
26. Babita Tanwar, Priyank Purohit, Banothu Naga Raju, Dinesh Kumar, Damodara N. Kommi, and Asit K. Chakraborti,\* "An "all-water" strategy for regiocontrolled synthesis of 2-aryl quinoxalines," *RSC Advances*, **2015**, *5* (16), 11873-11883. **Cited 20 times. IF: 3.108**
27. Kapileswar Seth, Manesh Nautiyal, Priyank Purohit, Naisargee Parikh, and Asit K. Chakraborti,\* "Palladium Catalyzed C<sub>sp2</sub>-H Activation for Direct Aryl Hydroxylation: Unprecedented Role of 1,4-Dioxane as Source of Hydroxyl Radical," *J. Chem. Soc. Chem. Commun.*, **2015**, *51* (1), 191-194. **Cited 42 times. IF: 6.319**
28. Dinesh Kumar, Asim Kumar, Mohammad Mohsin Qadri, Md. Imam Ansari, Abhishek Gautam and Asit K. Chakraborti,\* "In(OTf)<sub>3</sub>-catalyzed synthesis of 2-styryl quinolines: scope and limitations of metal Lewis acids for tandem Friedländer annulation–Knoevenagel condensation," *RSC Advances*, **2015**, *5* (4), 2920-2927. **Cited 9 times. IF: 3.108**

29. Shaminder Singh, Pravin J. Wanjari, Sonam Bhatia, Vijay C. Sonwane, Asit K. Chakraborti and Prasad V. Bharatam,\* "Design, synthesis, biological evaluation and toxicity studies of *N,N*-disubstituted biguanides as quorum sensing inhibitors," *Med. Chem. Res.*, **2015**, 24 (5), 1974-1987. **Cited 7 times. IF: 1.277**
30. Parth Shah, Tejas M. Dhameliya, Rohit Bansal, Manesh Nautiyal, Damodara N. Kommi, Pradeep S. Jadhavar, Jonnalagadda Padma Sridevi, Perumal Yogeewari, Dharmarajan Sriram, and Asit K. Chakraborti,\* "*N*-Arylalkylbenzo[*d*]thiazole-2-carboxamides as anti-mycobacterial agents: Design, new methods of synthesis and biological evaluation," *Med. Chem. Commun.* **2014**, 5 (10), 1489-1495. **Cited 15 times. IF: 2.608**
31. Kapileswar Seth, Sanjeev K. Garg, Raj Kumar, Priyank Purohit, Vachan S. Meena, Rohit Goyal, Uttam C. Banerjee and Asit K. Chakraborti,\* "2-(2-Arylphenyl)benzoxazole As a Novel Anti-Inflammatory Scaffold: Synthesis and Biological Evaluation," *ACS Med. Chem. Lett.* **2014**, 5 (5), 512-516. **Cited 36 times. IF: 3.746 3.794**
32. Kapileswar Seth, Priyank Purohit, and Asit K. Chakraborti,\* "Cooperative Catalysis by Palladium-Nickel Binary Nanocluster for Suzuki-Miyaura Reaction of *Ortho*-Heterocycle-Tethered Sterically Hindered Aryl Bromides," *Org. Lett.* **2014**, 16 (9), 2334-2337. **Cited 25 times. IF: 6.579 6.492**
33. Linga Banoth, Bhukya Chandarrao, Brahmam Pujala, Asit K. Chakraborti,\* U. C. Banerjee, "New and Efficient Chemo-enzymatic Synthesis of (*R*)- and (*S*)-Bunitrolol," *Synthesis* **2014**, 46 (4), 479-488. **Cited 2 times. IF: 2.65**
34. L Adane, S. Bhagat, M. Arfeen, S. Bhatia, R. Sirawaraporn, W. Sirawaraporn, Asit K. Chakraborti, P. V. Bharatam, "Design and synthesis of guanylthiourea derivatives as potential inhibitors of *Plasmodium falciparum* dihydrofolate reductase enzyme," *Bioorg. Med. Chem. Lett.* **2014**, 24 (2), 613-617. **Cited 12 times. IF: 2.486**
35. Kapileswar Seth, Sudipta Raha Roy, Damodara N. Kommi, Bhavin V. Pipaliya and Asit K. Chakraborti,\* "Silver nanoparticle-catalysed phenolysis of epoxides under neutral conditions: scope and limitations of metal nanoparticles and applications towards drug synthesis," *J. Mol. Catal. A: Chem.* **2014**, 392C, 164-172. **Cited 9 times. IF: 3.958**
36. Srikant Bhagat, Parth Shah, Sanjeev K. Garg, Shweta Mishra, Preet Kamal, Sushma Singh and Asit K. Chakraborti,\* " $\alpha$ -Aminophosphonates as novel antileishmanial chemotypes: synthesis, biological evaluation, and CoMFA studies," *Med. Chem. Commun.* **2014**, 5 (5), 665-670. **Cited 15 times. IF: 2.608**



37. Linga Banoth, Brahmam Pujala, Asit K. Chakraborti and Uttam C. Banerjee,\* “Development and validation of HPLC method for the resolution of derivatives of 1-bromo-3-chloro-2-propanol: a novel chiral building block for the synthesis of pharmaceutically important compounds,” *J. Anal. Chem.* **2014**, 69 (12), 1206-1213. **IF: 0.723**
38. Dinesh Kumar, Mukesh Sonawane, Brahmam Pujala, Varun K. Jain, Srikant Bhagat and Asit K. Chakraborti,\* “Supported protic acid-catalyzed synthesis of 2,3-disubstituted thiazolidin-4-ones: enhancement of the catalytic potential of protic acid by adsorption on solid support,” *Green Chem.* **2013**, 15 (10), 2872-2884. **Cited 36 times. IF: 9.125**
39. Dinesh Kumar, Kapileswar Seth, Damodara N. Kommi, Srikant Bhagat and Asit K. Chakraborti,\* “Surfactant micelles as microreactors for the synthesis of quinoxalines in water: scope and limitations of surfactant catalysis,” *RSC Advances*, **2013**, 3 (35), 15157-15168. **Cited 32 times. IF: 3.108**
40. Kapileswar Seth, Sudipta Raha Roy, Bhavin V. Pipaliya and Asit K. Chakraborti,\* “Synergistic Dual Activation Catalysis by Palladium Nanoparticles for Epoxide Ring Opening with Phenols,” *J. Chem. Soc. Chem. Commun.*, **2013**, 49 (52), 5886 - 5888. **Cited 31 times. IF: 6.319**
41. Damodara N. Kommi, Dinesh Kumar, Kapileswar Seth, and Asit K. Chakraborti,\* “Protecting group-free concise synthesis of (RS)/(S)-lubeluzole,” *Org. Lett.* **2013**, 15 (6), 1158-1161. **Cited 24 times. IF: 6.579 6.492**
42. Damodara N. Kommi, Dinesh Kumar, and Asit K. Chakraborti,\* ““All-water chemistry” for a concise total synthesis of the novel class antianginal drug (RS), (R), (S)-ranozaline,” *Green Chem.* **2013**, 15 (3), 756-767. **Cited 28 times. IF: 9.125**
43. Damodara N. Kommi, Pradeep S. Jadhavar, Dinesh Kumar, and Asit K. Chakraborti,\* “All water” one-pot diverse synthesis of 1,2-disubstituted benzimidazoles: hydrogen bond driven ‘synergistic electrophile-nucleophile dual activation’ by water,” *Green Chem.* **2013**, 15 (3), 798-810. **Cited 58 times. IF: 9.125**
44. Dinesh Kumar, Damodara N. Kommi, Rajesh Chebolu, Sanjeev K. Garg, Raj Kumar and Asit K. Chakraborti,\* “Selectivity control during the solid supported protic acid catalysed synthesis of 1,2-disubstituted benzimidazoles and mechanistic insight to rationalize selectivity,” *RSC Advances* **2013**, 3 (1), 91-98. **Cited 18 times. IF: 3.108**
45. Linga Banoth, Thete K Narayana, Brahmam Pujala, Asit K. Chakraborti and Uttam Chand Banerjee “New chemo-enzymatic synthesis of (R)-1-chloro-3-(piperidin-1-yl) propan-2-ol,” *Tetrahedron Asymmetry* **2012**, 23 (22-23), 1564-1570. **Cited 6 times. IF: 2.126**

46. Damodara N. Kommi, Dinesh Kumar, Rohit Bansal, Rajesh Chebolu and Asit K. Chakraborti,\* ““All-water” chemistry of tandem *N*-alkylation-reduction-condensation for synthesis of *N*-arylmethyl-2-substituted benzimidazoles,” *Green Chem.* **2012**, *14* (12), 3329-3335. **Highlighted in RSC Blog by Mary Badcock, Development Editor, *Green Chemistry*, and may also be included in future promotional material or press releases for *Green Chemistry*. Cited 41 times. IF: 9.125**
47. Rajesh Chebolu, Damodara N. Kommi, Dinesh Kumar, Narendra Bollineni and Asit K. Chakraborti,\* “Hydrogen-bond driven electrophilic activation for selectivity control: the scope and limitations of fluorous alcohol promoted selective formation of 1,2-disubstituted benzimidazoles and mechanistic insight for rational of selectivity,” *J. Org. Chem.* **2012**, *77* (22), 10158-10167. **Cited 56 times. IF: 4.849 4.805**
48. Dinesh Kumar, Damodara N. Kommi, Alpesh R. Patel and Asit K. Chakraborti,\* “L-Proline catalysed activation of methyl ketones/active methylene compounds and DMF-DMA for synthesis of (2*E*)-3-dimethylamino-2-propen-1-ones,” *Eur J. Org. Chem.* **2012**, 6407-6413. **Cited 11 times. IF: 2.834**
49. Dinesh Kumar, Damodara N. Kommi, Alpesh R. Patel and Asit K. Chakraborti,\* “Catalytic procedures for multicomponent synthesis of imidazoles: selectivity control during the competitive formation of tri- and tetra-substituted imidazoles,” *Green Chem.* **2012**, *14*, 2038-2049. **Cited 48 times. IF: 9.125**
50. Anirban Sarkar, Sudipta Raha Roy, Dinesh Kumar, Chetna Madaan, Santosh Rudrawar, Asit K. Chakraborti,\* “Lack of correlation between catalytic efficiency and basicity of amines during the reaction of aryl methyl ketones with DMF-DMA: an unprecedented supramolecular domino catalysis,” *Org. Biomol. Chem.* **2012**, *10*, 281-286. **Cited 12 times. IF: 3.564**
51. Brahmam Pujala, Shivani Rana, Asit K. Chakraborti,\* “Zinc Tetrafluoroborate Hydrate as a Mild Catalyst for Epoxide Ring-opening with Amines: Scope and Limitations of Metal Tetrafluoroborates and Applications in the Synthesis of Anti-hypertensive Drugs (*RS*)/(*R*)/(*S*)-Metoprolols,” *J. Org. Chem.* **2011**, *76*, 8768-8780. **Cited 48 times. IF: 4.849 4.805**
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